NEW ENGLAND NOTE

PERSISTENCE OF CAREX CARYOPHYLLEA (CYPERACEAE) IN MASSACHUSETTS

L. A. STANDLEY

The European sedge, Carex caryophyllea Latourr. (section Mitratae Kukenth.), has been introduced into several areas of the northeast. Herbarium records indicate that this species became widely established in Massachusetts (Essex County, Norfolk County, Suffolk County, and Worcester County), with single records from Maine (Portland), Washington, DC, New York (Dutchess County), and New Brunswick (Albert County). The majority of herbarium records date from 1860 to 1905, but the earliest collections appear to be from the early 1800's in Massachusetts. With one exception (Palmer, 1935) I have seen no records for collections made after 1905 from Massachusetts sites.

In conjunction with treatment of the section for *The Flora of North America*, I attempted to determine whether this introduced species was persistent in Massachusetts by searching all localities for which there was sufficient label information. Ten sites were examined in Essex County, Suffolk County, and Norfolk County; of these, populations appear to have been extirpated in Salem, Westwood, Needham, and West Roxbury, but were re-located at Dedham, Norwood, and Boston localities. No new localities were

found during 1991.

Two small patches of Carex caryophyllea were located near the Downey School, Downey St., Dedham (Standley 1749), a site for which the previous record was in 1897 (S. K. Harris s.n.). A large population was located near the Xaverian High School on Clapboardtree St. in Norwood (Standley 1750), for which the previous record was 1884 (T. O. Fuller s.n.). A small population was located in the Arnold Arboretum, Jamaica Plain, on Peters Hill in the Sorbus collection (Standley 1761), for which the previous record was 1932 (E. J. Palmer 40185). Vouchers are deposited at NEBC.

Carex caryophyllea is widely distributed in Europe in dry, grassy or rocky soils (Chater, 1980), although it is generally restricted to chalk or limestone grassland in Britain (Jermy et al., 1982). Where it persists in Massachusetts, it occurs in habitats similar to C. pensylvanica Lam., including dry roadsides, margins of woods,

old dry pastures, and areas of poor soil in fields from which taller grasses (Dactylis glomerata L., Poa pratensis L.) appear to be excluded. Where it has been extirpated, development or other disturbance appears responsible; where not eliminated by disturbance, C. caryophyllea has been able to persist successfully for over 100 years, but has not colonized new sites. This finding suggests that reproduction is primarily vegetative, and that despite abundant flowering and seed set, this introduced species has not become weedy.

LITERATURE CITED

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VHB, INC.
P.O. BOX 9151
101 WALNUT ST.
WATERTOWN, MA 02272